PROJECT UPDATE #3

NMFS HONOLULU LABORATORY RENEWAL PROJECT

Number 3 of 3 April 2000

INTRODUCTION

This is the last newsletter to be distributed during the scoping phase for the renovation or replacement of the National Marine Fisheries Service (NMFS) Laboratory, located at 2570 Dole Street. The first newsletter, distributed in January 1999, previewed the conceptual design process and environmental assessment (EA). The second newsletter, distributed in March 1999, updated the status of architectural, engineering and environmental studies for the project. This final newsletter summarizes the major conclusions of the EA, compares the impacts of the alternatives, and identifies the recommended alternative. It also discusses results of concurrent analyses outside the EA process performed to evaluate the project alternatives.

WHAT ARE THE MAJOR CONCLUSIONS OF THE EA REGARDING CONSTRUCTION?

Manoa Stream. Protecting the water quality and biota of Manoa Stream would be a priority during construction. An erosion and sedimentation control plan would be implemented. Key features would include maintaining a 10-foot setback from the top of the streambank, installing sediment barriers at key locations, retaining existing vegetation on the streambank and in the setback, and immediately stabilizing or removing exposed soils.

Controlled Blasting. Blasting may be necessary to break up rock prior to excavation especially for the Renovation/Addition Alternative. Modern, "delay blasting" techniques would be used to avoid vibration damage to the streambank or nearby buildings.

Dust. Water sprays would be used as needed. Dust-generating activities would be curtailed during periods of high winds. Trucks loaded with debris or dirt would be covered to prevent dust emissions during transport.

PROJECT ALTERNATIVES

The three alternatives considered in the EA are:

- The **Renovation/Addition Alternative** involves demolition of the existing annex buildings and construction of a new building which would tie into a renovated existing main building;
- The **Demolition and Reconstruction Alternative** involves demolition of all existing structures and construction of a completely new facility; and
- The **No Action Alternative**, required by NEPA, involves analyzing the consequences of taking no development actions at this time.

Noise. Construction noise may affect occupants of the nearest buildings and nearby outdoor activities. A maximum average daily noise goal would be established for the contractor. Noise control measures would include erection of noise barriers.

Cultural Resources. Existing buildings on the site do not qualify for inclusion on the National Register of Historic Places. There is, however, the possibility of encountering subsurface cultural remains, including human burials, during excavation. Subsurface testing by a qualified archaeologist would be done prior to any excavation. If cultural resources were found, a mitigation program would be developed in consultation with the State Historic Preservation Division (SHPD).

East-West Center Operations. It is proposed that staging occur in the area between the existing NMFS parking area and Burns Hall, and the 20 EWC parking spaces located there be temporarily relocated to the grassed area north of Pope Road. Project staff are involved in ongoing coordination with the EWC on this and other issues affecting EWC property and operations.

WHAT ARE THE MAJOR CONCLUSIONS OF THE EA REGARDING OPERATION?

Manoa Stream and Pathway. Neither action alternative would increase runoff to Manoa Stream. Use of pesticides and herbicides on the grounds would be kept to a minimum. Runoff quality would improve because water that enters the parking garage would be discharged to the sanitary sewer system, rather than to the stream as occurs now from surface parking.

A project to create a bicycle/pedestrian pathway along Manoa Stream has been proposed by

others. Near the Laboratory the pathway would be on the opposite side of the stream, and there would be no conflict with the Laboratory Renewal Project.

Hazardous Materials and Waste Storage. Design and operation of hazardous materials and temporary waste storage facilities would be coordinated with the City and County of Honolulu Fire Department and the State of Hawaii Department of Health, and would comply with all applicable codes.

Adequate On-Site Parking. The shortage of parking on the UH Manoa campus is a critical issue with the community. Both action alternatives would substantially increase the ratio of onsite parking spaces to employees and provide more visitor parking.

Noise and Traffic. Under the Demolition and Reconstruction Alternative, Laboratory employees would exit the parking garage to Pope Road and then to East-West Road. During the afternoon peak hour, the number of vehicles exiting the site via Pope Road would increase from 20 to 59. Resulting noise levels in the EWC courtyard would increase from 43 to 48 dBA. Based on U.S. EPA and Federal Highway Administration criteria, neither the 48 dBA sound level nor the 5 dBA increase is considered significant.

The project would add approximately nine new vehicle trips to the local street network during the morning peak hour, and approximately 15 new trips during the afternoon peak hour. These small increases would not add significantly to traffic congestion in the area.

Visual Impacts. Under either action alternative, the proposed four-story building would add considerably to the developed volume of the site, but the scale would be similar to existing buildings in the vicinity. Under the Renovation/Addition Alternative, the flat roof of the addition would be nearly the same height as the immediately adjacent Burns Hall. The proposed sloped roofs on some sections of the Demolition and Reconstruction Alternative would add approximately 16 feet to the height of the building compared to what it would be with a flat roof . Its greater flexibility in building design and location however, would result in a smaller building footprint, more open space, a more attractive presence on Dole Street, and a more cohesive design.

Communications Systems. To operate the proposed satellite receiving station, INMARSAT communication system, and voice radio system, licenses would be required from the National Telecommunications Information Administration (NTIA) or the Federal Communications Commission (FCC). The potential for interference with (or from) other systems in the area, including the microwave communication system used by the University of Hawaii to operate the Hawaii Interactive Television System, would be investigated. If necessary, the proposed systems would be modified or relocated to avoid significant adverse impacts.

WHICH ALTERNATIVE DID THE EA RECOMMEND?

The No Action Alternative was rated below either of the two action alternatives because it fails to respond to the critical needs for the project. The lack of modern research facilities would seriously impair NMFS's ability to respond to new, congressionally-mandated requirements for more sophisticated research in support of fisheries management decisions. Existing overcrowded conditions would worsen as staff are added, and there would continue to be inadequate office and meeting space, employee facilities, collaborative work areas, and parking. In addition, although some retrofitting would take place to provide accommodations for disabled persons, the Laboratory would not fully comply with ADA requirements. Finally, the inability to consolidate related functions would continue to result in less efficient development and implementation of programs. Taken together, these deficiencies would continue to foster a work environment that is not conducive to scientific research, regulatory administration and compliance, employee moral and productivity, effective communication and collaboration, or public access.

Although there are some functional differences between the two action alternatives, they are specifically designed to correct the existing deficiencies and to meet the program requirements of the NMFS offices to be consolidated into the new facility. Both alternatives would also benefit the University of Hawaii by enhancing opportunities for collaborative research between NMFS and University faculty and students.

The EA concludes that with the proposed mitigation, neither of the action alternatives would have a significant adverse impact on any element of the environment. There are still, however, some differences between the action alternatives:

- Because there is only one parking level under the Demolition and Reconstruction Alter-

native, the excavation is less likely to encounter the massive basalt layer beneath the site. Therefore, conventional excavation techniques may be used as an alternative to controlled blasting.

- The Demolition and Reconstruction Alternative would separate visitor and employee vehicle traffic, resulting in less vehicle traffic in the main entrance courtyard, and allowing more flexibility in its architectural design. These benefits are made possible by the proposed new driveway to the parking garage off Dole Street, which is not feasible under the Renovation/Addition Alternative.
- The ramp out the mauka (north) end of the parking garage under the Demolition and Reconstruction Alternative would allow employees exiting the site to make safer turns onto Dole Street at the signalized intersection with East-West Road. It is not feasible to construct a ramp out the mauka (north) end of the parking garage under the Renovation/Addition Alternative, because it would eliminate a number of parking spaces on each of the two parking levels.
- The Demolition and Reconstruction Alternative allows more flexibility in the location and architectural design of the new building, resulting in a smaller building footprint; more open space for landscaping and courtyards; a more attractive presence on Dole Street; and a more cohesive design.
- The Renovation/Addition Alternative reuses the existing building, but it complicates the engineering design of the new facility. Special seismic design features must be incorporated to avoid excessive stress at the transition between old and new structures. Insulation of the building envelope and vapor barriers are more difficult to achieve compared to new construction. Also, significant architectural and structural changes may be required in the existing building for access to new mechanical and electrical equipment and to carry equipment weight.

The two action alternatives ultimately differ in their functionality and ability to meet project needs. Because the Demolition and Reconstruction Alternative would create a completely new building with four full floors, there is a much greater flexibility to design space to meet the functional requirements of the future users. Under the Renovation/Addition Alternative, functionality must be compromised to provide the best fit of space within the existing building envelope.

In consideration of the above differences, the EA recommends proceeding with the Demolition and Reconstruction Alternative.

WHAT OTHER STUDIES WERE CONDUCTED AND WHAT DID THEY CONCLUDE?

While the EA examined the environmental impacts of the alternatives, and recommended a preferred alternative on that basis, the ultimate selection of the preferred alternative involved a broader comparison of the alternatives using techniques of multi-criteria, decision-making theory. Evaluation factors included economic, technical (architectural and engineering), environmental and programmatic criteria. The No Action Alternative was rejected on programmatic grounds and would represent a substantial cost to NMFS in terms of failing to meet its mission in the Central Pacific. It does, however, represent the best alternative in terms of cost and environmental impacts. The Renovation/Addition Alternative is acceptable programmatically and environmentally, but has substantial technical problems. The Demolition and Reconstruction Alternative was clearly superior on technical grounds. Further, the economic analysis of the two EA action alternatives and two additional scenarios (buying land and constructing a new facility elsewhere and leasing space elsewhere) showed the Demolition and Reconstruction Alternative to have the lowest cost and represent the best value. Specifically, it is more that $4M less expensive that the Renovation/Addition Alternative. These additional studies confirmed the conclusion of the EA that the Demolition and Reconstruction Alternative is clearly the preferred alternative.

WHAT IS THE CURRENT STATUS OF THE PROJECT?

Decision. On February 18, 2000, NOAA, in conjunction with the U.S. Department of Commerce, made the decision to proceed with the design of the Demolition and Reconstruction Alternative.

Next Step. The Project Team is in the process of awarding two contracts for the upcoming Design Phase: architectural/engineering design and construction management services. The anticipated commencement date for the Design Phase is late June 2000.

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COMMENT FORM

If you or someone you know would like to be added to the project mailing list to receive future project information, or if you have input concerning the NMFS Honolulu Laboratory Renewal Project, please complete this form and mail it back to the address listed below.

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The Renovation/Addition Alternative

The Demolition and Reconstruction Alternative

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